

Student Self-analysis

Quiz

The following quiz is designed to provide you an opportunity to practice items you will be required to demonstrate during this course.

Compass Direction:

1. Identify the compass direction related to the following:
- | | | | |
|------------|------------|------------|------------|
| E _____° | SSE _____° | NW _____° | ENE _____° |
| WSW _____° | NE _____° | S _____° | NNW _____° |
| SE _____° | SSW _____° | WNW _____° | W _____° |
| N _____° | NNE _____° | SW _____° | ESE _____° |

True vs Relative Bearing:

2. While standing due East, a mariner observed a flare bearing 325° relative to him.
What “**true**” bearing was the flare from the observer? _____° T
3. A fishing vessel captain was piloting his boat on a course of 190° T when he observed a boat fire directly to his left.
What “**true**” bearing was the flare from the observer? _____° T
What “**relative**” direction was the flare from the observer? _____° T

Conversions:

4. Convert the following: (° = degree) (' = minute) (" = second)
- | | |
|--------------------|--------------------------------------|
| 1° = _____ minutes | 1° = _____ seconds |
| 1' = _____ seconds | 1/10 th ° = _____ minutes |

Basic Navigation (Dead Reckoning) :

5. A vessel transiting at 12 knots for 3.5 hours should travel _____ NM.
6. A vessel completing a 32 NM voyage in 4 hours is transiting at a speed of _____ KTS.
7. A vessel transiting at a speed of 6.5 KTS should complete a voyage of 32.5 NM in approximately _____ hours.

Answers

Compass Direction:

1. Each compass point = 22.5°

E	<u>090°</u>	SSE	<u>157.5°</u>	NW	<u>315°</u>	ENE	<u>067.5°</u>
WSW	<u>247.5°</u>	NE	<u>045°</u>	S	<u>180°</u>	NNW	<u>337.5°</u>
SE	<u>135°</u>	SSW	<u>202.5°</u>	WNW	<u>292.5°</u>	W	<u>270°</u>
N	<u>000°</u>	NNE	<u>022.5°</u>	SW	<u>225°</u>	ESE	<u>112.5°</u>

True vs Relative Bearing:

2. While standing due East, a mariner observed a flare bearing 325° relative to him.
What “true” bearing was the flare from the observer? 055° T
(There is 360° in the compass rose. If the mariner is standing due East, his direction becomes 000° relative. Subtract the observed bearing (325°) from $360^\circ = 35^\circ$. To find out what the true bearing is, Subtract 35° from 090° (due east) = 055° T)
3. A fishing vessel captain was piloting his boat on a course of 190° T when he observed a boat fire directly to his left.
What “true” bearing was the flare from the observer? 100° T
(Subtract 90° from the vessel’s course = 100° .)
- What “relative” direction was the flare from the observer? 090° T

Conversions:

4. Convert the following: (° = degree) (' = minute) ('' = second)

$$\begin{array}{ll} 1^\circ = \underline{60} \text{ minutes} & 1^\circ = \underline{360} \text{ seconds} \\ 1' = \underline{60} \text{ seconds} & 1/10^{\text{th}} \circ = \underline{6} \text{ minutes} \end{array}$$

Basic Navigation (Dead Reckoning) :

5. A vessel transiting at 12 knots for 3.5 hours should travel 42 NM.
6. A vessel completing a 32 NM voyage in 4 hours is transiting at a speed of 8 KTS.
7. A vessel transiting at a speed of 6.5 KTS should complete a voyage of 32.5 NM in approximately 5 hours.